

ISO 8692:2012-02 (E)

Water quality - Fresh water algal growth inhibition test with unicellular green algae

| Contents | | Page |
|--|--|-------------|
| Foreword | | iv |
| 1 | Scope | 1 |
| 2 | Normative references | 1 |
| 3 | Terms and definitions | 1 |
| 4 | Principle | 2 |
| 5 | Reagents and media | 2 |
| 6 | Apparatus | 4 |
| 7 | Procedure | 5 |
| 7.1 | Preparation of growth medium | 5 |
| 7.2 | Preparation of preculture and inoculum | 5 |
| 7.3 | Choice of test sample concentrations | 5 |
| 7.4 | Preparation of test sample and stock solutions | 5 |
| 7.5 | Preparation of test and control batches | 6 |
| 7.6 | Incubation | 6 |
| 7.7 | Measurements | 7 |
| 8 | Validity criteria | 7 |
| 9 | Calculation | 7 |
| 9.1 | Plotting of growth curves | 7 |
| 9.2 | Calculation of percentage inhibition | 8 |
| 9.3 | Determination of ErCx (e.g. ErC10 and ErC50) | 8 |
| 10 | Expression of results | 8 |
| 11 | Interpretation of results | 9 |
| 12 | Precision | 9 |
| 13 | Test report | 9 |
| Annex A (informative) Rapid screening of waste water algal growth inhibition | | 11 |
| Annex B (informative) Test procedure with algae from algal beads, with direct measurement of algal growth in spectrophotometric cells | | 14 |
| Annex C (informative) Procedure for immobilization of algae in alginate beads | | 19 |
| Bibliography | | 21 |